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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* ANDREW W. DORNBUSCH and CHARLES D. THOMPSON

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Appeal 2009-012384  
Application 10/691,212  
Technology Center 2800

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Before MAHSHID D. SAADAT, KALYAN K. DESHPANDE,  
and ERIC B. CHEN, *Administrative Patent Judges*.

SAADAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1, 3-8, 10-21, and 23-29, which constitute all the claims pending in this application, as claims 2, 9, 22, 30, and 31 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

## STATEMENT OF THE CASE

### *Introduction*

Appellants' invention relates to integrated circuits used in radio receivers (*see Spec. ¶ [0002] and [0006]*).

Exemplary independent claim 1 reads as follows:

1. An integrated circuit comprising:

a semiconductor substrate having a first pair of bonding pads for conducting a differential output signal thereon and configured to be coupled to an input of a first external filter, and a second pair of bonding pads for conducting a differential input signal thereon and configured to be coupled to an output of said first external filter; and

an integrated circuit package encapsulating said semiconductor substrate and having first and second terminal pairs corresponding and coupled to said first and second pairs of bonding pads, respectively,

wherein said first and second terminal pairs are separated by a first predetermined distance sufficient to maintain an input-to-output isolation attenuation therebetween of not less than a first stopband attenuation of the first external filter.

### *Rejections*

The Examiner relies on the following prior art in rejecting the claims:

Hazama	US 4,296,391	Oct. 20, 1981
Dreifus	US 5,576,589	Nov. 19, 1996
Hayashi	US 6,329,715 B1	Dec. 11, 2001
Hikita	US 6,396,154 B1	May 28, 2002

Claims 1, 3-8, 10-21, and 23-29 stand rejected under the second paragraph of 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Claims 1, 3, 5-7, 21, and 23 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hikita.

Claims 15-19 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Dreifus.

Claims 26, 27, and 29 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Hazama.

Claims 4, 8, 10-14, 24, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hikita.

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Dreifus and Hayashi.

Claim 28 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hazama.

## ANALYSIS

We have reviewed the Examiner's rejections in light of Appellants' contentions that the Examiner has erred. We agree with Appellants' conclusions.

### *Rejection under 35 U.S.C. § 112, second paragraph*

The Examiner finds that the limitation "not less than a first stopband attenuation of the first external filter" recited in the claims is indefinite since the number of the first stopband attenuation may be any positive or negative integer number (Ans. 3-4). We agree with Appellants' reasoning and rebuttal showing that the disputed claims are clear, definite, and capable of pointing out and distinctly claim the subject matter regarded as the invention (*see* App. Br. 7-10). We note that Appellants, in the "SUMMARY OF THE CLAIMED SUBJECT MATTER" section, point out (App. Br. 2-3) that the

recited criteria based on the stopband attenuation of the external filter is described in paragraphs [0023] and [0027]-[0031] of the Specification. Furthermore, we agree with Appellants (App. Br. 9-10) that one of ordinary skill in the art would have been able to determine the finite stopband attenuation of a selected external filter and whether the input-to-output isolation attenuation provided by the bonding pads separation is not less than the determined stopband attenuation.

Finally, we observe that the Examiner's reliance (*see* Ans. 20-26) on the decision in *Ex parte Brummer*, 12 USPQ2d 1653 (Bd. Pat. App. & Inter. 1989), is misplaced. The Board found in *Brummer* that because the evidence of record showed no known standard for sizing a bicycle to a rider, one of ordinary skill in the art would not have known what size rider a particular bicycle was "designed for" and whether a particular bicycle was covered by that claim. *Id.* at 1655. However, determining the definiteness of a claim depends on the facts involved. In the present appeal, the facts are closer to what was at issue in *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565 (Fed. Cir. 1986), where the front leg portion of a wheelchair was so dimensioned as to be insertable between the doorframe of an automobile and the seat thereof. *Id.* at 1575. Appellants' claim 1 recites the separation between the first and the second terminal pairs to be such that an input-to-output isolation attenuation therebetween is "not less than a first stopband attenuation of the first external filter." As such, when the external filter is selected, its first stopband attenuation would also be known. Therefore, it does not render the claim indefinite, but merely gives the scope of the claim some breadth.

Therefore, we do not sustain the rejection of claims 1, 3-8, 10-21, and 23-29 under the second paragraph of 35 U.S.C. § 112.

*Rejections under 35 U.S.C. §§ 102 and 103*

With respect to the § 102 rejection of claim 1 over Hikita, the Examiner takes the position that the mere presence of a surface acoustic wave (SAW) filter in Hikita's semiconductor chip meets all the claimed features because the meets and bounds of the claim term "a first predetermined distance ... an input-to-output isolation attenuation ... a first stopband attenuation of the first external filter" are unclear (Ans. 27). However, these features cannot be read out of the claim because, as discussed above, they define the meets and bounds of the claim. Therefore, we agree with Appellants (Br. 12) that Hikita fails to recognize the relational link between the first stopband attenuation of the external filter and the distance between the terminal pairs that would maintain an input-to-output isolation attenuation therebetween. Therefore, we find that Hikita does not anticipate claims 1, 3, 5-7, 21, and 23.

Similarly, regarding the § 102 rejections of claim 15 over Dreifus and of claim 26 over Hazama, the Examiner finds the claims anticipated by these references because the meets and bounds of the claim term related to the distance between the bonding pads and the input-to-output isolation attenuation that is not less than a first stopband attenuation of the external filter are unclear (Ans. 32-37). As discussed above, the disputed claim term is clearly defined and is not shown to be disclosed in the applied prior art. Therefore, we also find claims 15-19 are not anticipated by Dreifus, nor are claims 26, 27, and 29 anticipated by Hazama. We also do not sustain the

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35 U.S.C. § 103 rejections of dependent claims 4, 8, 10-14, 20, 24, 25, and 28 since the Examiner has not pointed to any teachings in Hazama or any modifications in Hikita or Hazama that would have cured the above-mentioned deficiencies of Hikita, Dreifus, or Hazama.

## CONCLUSIONS

On the record before us, we find that the Examiner erred in rejecting claims 1, 3, 5-7, 15-19, 21, 23, 26, 27, and 29 under 35 U.S.C. § 102(b) and claims 4, 8, 10-14, 20, 24, 25, and 28 under 35 U.S.C. § 103(a).

## DECISION

The Examiner's decision rejecting claims 1, 3-8, 10-21, and 23-29 is reversed.

REVERSED

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